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10/825,389

04/15/2004

Kim R. Smith

1804US01

8462

43896

7590

02/02/2009

ECOLAB INC.

MAIL STOP ESC-F7, 655 LONE OAK DRIVE

EAGAN, MN 55121

EXAMINER

OGDEN JR, NECHOLUS

ART UNIT

PAPER NUMBER

1796

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/825,389  
Filing Date: April 15, 2004  
Appellant(s): SMITH, KIM R.

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Andrew Sorensen  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11-13-2008 appealing from the Office action mailed 5-19-2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,990,074	GROSS ET AL	11-1999
5,271,530	UEHIRA ET AL	12-1993

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross et al (5,990,074) in view of Uehira et al (5,271,530).
2. Gross et al disclose a process of making a liquid fatty acid soap that comprises saponifying fatty acids with sodium hydroxide and water to produce a 60/40 tallow/coco fatty acid ratio (see column 2, lines 18-30; examples 2 and 3). In Examples 2 and 3, tallow/coco fatty acid soaps are blended with sodium hydroxide and water to produce soaps products. Further, Gross et al teach that the preparation of liquid soaps products are suggested (column 6, lines 38-40).

Gross et al is silent with respect the dispenser of the liquid soap and viscosity of composition.

Uehira et al discloses a foam pump for dispensing liquids such as soaps (col. 1, lines 5-10).

It would have been obvious to one of ordinary skill in the art to combine the liquid soap product of Gross et al and the dispenser of Uehira et al to pump and foam said liquid soap onto the users skin, because the artisan of ordinary skill would have been motivated to include a mechanism to dispense said liquid soap onto the users skin to effectively deliver the soap product in an efficient manner that delivers less soap materials which aid in cost effectiveness and enables the user to quickly lather thereby reducing wash time. With respect to the alkali salts and the solids contents, it is the position of the examiner that these limitations would have been obvious to the soap

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components of Gross since they contain that fatty acid material and the alkali salt as claimed. Therefore, in the absence of a showing to the contrary one of ordinary skill would expect the soap materials of Gross to encompass the salt and solids content as claimed. Moreover, since the pump dispenser of Uehira et al forms soap formulations into foam, it would have been obvious to the skilled artisan that said formulations pumped would have low viscosity less than 100 cps since Gross et al teach liquid preparation of soap products and Uehira et al forms liquid soap into foam soap products. The artisan would have expected similar functional characteristics such as viscosity in the absence of a showing to the contrary.

#### **(10) Response to Argument**

Appellant argues that the prior art of record does not teach or suggest the claimed invention; or provide motivation for a reasonable expectation of success.

The examiner respectfully disagrees and directs appellant's attention Gross et al which teach liquid fatty acid soaps C16-C18 and sodium hydroxide as claimed. Further, Uehira et al teach the use of foam heads on liquid soap dispenser. Therefore, the skilled artisan, with reasonable expectation of success, would have been motivated to combine the references to specifically teach appellant's claimed invention.

**An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. \_\_\_, 2007 WL 1237837, at \*12 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").**

Appellant argues that the quantity of triglycerides produced from Gross et al and its production of glycerin from saponification.

The examiner contends that the feedstock employed by Gross et al which yields less than 6% by weight of glycerin is a feature disclosed in Gross et al, but it is not outside the scope of the claimed invention. Specifically appellant's call out a broad range of fatty acid soaps such as C6-C22 and Gross et al specifically suggest C16 and C18, well within the claimed limitation. Further the amount of glycerin produced by C16 and C18 fatty acid is inherent to the claimed invention which clearly permits these carbon chain fatty acids as soap products.

Appellant argues that Gross et al is silent with respect to the process of producing liquid soaps.

The examiner contends that while the preferred embodiments of Gross et al teach solid soap products, Gross et al do call out the intended use of said soap compositions for liquid soaps (col. 6, lines 20-38). The examiner further contends that applicant's claims are composition claims and therefore not limited by the process steps. Furthermore, appellant's claimed composition is limited to C6-C24 fatty acid with optional ingredients and these limitation are clearly suggested by Gross et al (examples 2 and 3).

Appellant argues that Gross et al is silent with respect to the viscosity of the liquid soap.

The examiner contends that the most comprehensive claims states C6-C24 fatty acid soap and optional ingredients. Gross et al, in examples 2 and 3 call out C16 and

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C18 fatty acid soaps and over 30% water before drying and states that said examples could be altered to produce liquid preparations. The examiner contends that in the liquid preparation, the skilled artisan would have reasonably construed to optimize the water content to satisfy any liquid preparation and therefore encompass a viscosity of less than 100 cps since Gross et al do not comprise any thickeners, polymers or viscosity adjusting agents to suggest otherwise. Therefore, it would have been within the purview of the artisan of ordinary skill to produce liquid soap products according to the claimed invention because Gross et al suggest said liquid preparations and does not include adjunct materials to suggest a thickened composition, where one of ordinary skill in the absence of a showing to the contrary would expect the compositions of Gross et al, when prepared in liquid form, to encompass characteristics such as less than 100 cps viscosities.

Appellant argues that Uehira et al does not disclose a viscosity of less than 100 and further includes surfactants such as anionic and amphoteric surfactants (column 5, lines 20-25).

The examiner contends that Uehira et al is only relied upon to teach a foaming head that transforms liquid soaps into foaming compositions upon dispensing. With respect to the additional components, the examiner is unable to locate the alleged teaching of synthetic surfactants and asserts that appellant has failed to prove this teaching by Uehira et al. The examiner further asserts that Uehira et al do not suggest compositions only mechanical parts associated with a foaming dispenser.

Appellant argues that Gross et al fails to suggest that said composition is a mixture of soap and water.

The examiner contends and respectfully disagrees and directs appellant to examples 2 and 3 which clearly suggest over 30% water admixed with C16 and C18 fatty acid soaps for preparing solid soaps. Therefore, one of ordinary skill in the absence of unexpected results, would expect the skilled artisan to include additional amounts of water in preparing liquid soaps thereby optimizing the ratio of soap to water to produce liquid compositions as suggested by Gross et al (col. 6, lines 30-38).

Appellant argues that Gross et al does not disclose the alkali salts and solids content.

The examiner asserts that Gross et al is silent with respect to the alkali salts content and solids content, however, Gross et al teach the specific alkali metal salts components such as sodium or potassium and further teach the specific fatty acid C16 or C18 as claimed in order to produce a fatty acid soap product. Therefore, in the absence of unexpected results one of ordinary skill would expect the soaps of Gross et al to have similar characteristics such as salts contents and solid contents as the claimed invention because Gross et al specifically suggest the fatty acid soaps and salts as claimed.

Appellant argues that Uehira et al adds surfactants to impart foam (col. 4, lines 50-55) and therefore would not be combinable with Gross et al .

Again, the examiner is unable to locate any suggestion of synthetic surfactants disclosed in Uehira et al. Further, Uehira et al is relied upon only for the use of foaming



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heads employed for dispensing liquid soaps. Accordingly, one of ordinary skill in the art, absent a showing to the contrary, would have been motivated to combine a liquid soap to a liquid soap foaming dispenser with the expectation of reasonable success in view of the teachings disclosed in Gross et al and Uehira et al and further because the artisan of ordinary skill would have been motivated to include a mechanism to dispense said liquid soap onto the users skin to effectively deliver the soap product in an efficient manner that delivers less soap materials which aid in cost effectiveness and enables the user to quickly lather thereby reducing wash time.

**An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. \_\_\_, 2007 WL 1237837, at \*12 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").**

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Necholus Ogden, Jr./

Primary Examiner Art Unit 1796

Conferees:

/Harold Y Pyon/

Supervisory Patent Examiner, Art Unit 1796

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/Gregory L Mills/

Supervisory Patent Examiner, Art Unit 1700